

## UNITED STATES DEPARTMENT OF COMMERCE **United States Patent and Trademark Office**

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/534,474 03/24/00 WOODS D W00001 **EXAMINER** WM01/0508 THE LAW OFFICE OF EVERETT G. DIEDERIKS J LAGIL 12471 DILLINGHAM SQUARE #301 ART UNIT PAPER NUMBER WOODBRIDGE VA 22192 2673 DATE MAILED: 05/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 





# Office Action Summary

Application No.

09/534,474

Examiner

LAO, LUN- TI

2673

	LAO, LUN-	71	2673	
—The MAILING DATE of this communication appears	on the cover sheet bene	ath the corr	espondence ad	dress
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO E OF THIS COMMUNICATION.	EXPIRE Three N	MONTH(S) F	ROM THE MAIL	ING DATE
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.13 from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply</li> <li>If NO period for reply is specified above, such period shall, by default, exp</li> <li>Failure to reply within the set or extended period for reply will, by statute,</li> </ul>	within the statutory minimum opire SIX (6) MONTHS from the	of thirty (30) day	ys will be considered f this communication	d timely.
Status				
☐ Responsive to communication(s) filed on				
☐ This action is FINAL.				
<ul> <li>Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935 0</li> </ul>		tion as to th	e merits is close	e <b>d</b> in
Disposition of Claims				
Claim(s) 1 - 2 0	,	is/are per	nding in the appli	cation.
Of the above claim(s)				
□ Claim(s)				sideration.
Claim(s) 1 − 20				
□ Claim(s)		=		
		•		
□ Claim(s)		are subje requireme		r election
Application Papers		·		
☐ See the attached Notice of Draftsperson's Patent Drawing R	eview, PTO-948.			
☐ The proposed drawing correction, filed on	• •	isapproved.		
☐ The drawing(s) filed on is/are objected	to by the Examiner.			
☐ The specification is objected to by the Examiner.				
☐ The oath or declaration is objected to by the Examiner.			•	
Priority under 35 U.S.C. § 119 (a)-(d)	•			
<ul> <li>□ Acknowledgment is made of a claim for foreign priority unde</li> <li>□ All □ Some* □ None of the CERTIFIED copies of the</li> <li>□ received.</li> <li>□ received in Application No. (Series Code/Serial Number)_</li> </ul>	priority documents have t		<u> </u>	
<ul> <li>received in this national stage application from the International</li> </ul>	ational Bureau (PCT Rule	1 7.2(a)).		
*Certified copies not received:			·	
Attachment(s)				
Information Disclosure Statement(s), PTO-1449, Paper No(s	) <b>≥</b> □ Interv	riew Summai	y, PTO-413	
⅓Notice of Reference(s) Cited, PTO-892	☐ Notice	e of Informal	Patent Application	on, PTO-152
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	☐ Other	r		
Office A	ction Summary			

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)



Art Unit: 2673

## Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 7, 10, 13-16, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Russo(5,336,002).

As to claims 7, 10 and 13, Russo teaches a keyboard comprising a plurality of keys arranged in an array on an upper side of a base(see figures 1, 13, 16; column 4, lines 55-68 and column 5, lines 1-6). The keys includes letter keys, a tab key, a backspace key and a function key, wherein both tab(233, 234) and backspace keys(232) are centrally located within the array(see figures 2, 13 and 16).

As to claims 13, 14, 15 and 19, Russo teaches a plurality of shift keys(142, 148, 136, 150, 138 or 242, 236, 238, 250 and 248) located in a lower central portion of the array(see figures 1, 2, 13, 16; column 5, lines 2-6 and lines 63-64; and column 9, lines 4-42).

As to claim 16, the plurality of shift keys(142, 148, 136, 150, 138 or 242, 236, 238, 250, 248) are arranged in two different rows on the keyboard(110)(see figures 1, 2, 13 and 16).



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As to claim 18, Russo teaches two(148, 150 or 248, 250) of least three separate shift keys perform identical function(see figures 1, 2, 13, 16 and column 9, lines 4-42).

## Claim Rejections - 35 U.S.C. § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Wakatsuki et al(5,065,003).

Russo teaches a scroll key(Scroll Lock Key) above the shift keys(236, 248, 250)(see figure 13).

Russo fails to teach a scroll button located directly adjacent at least one of shift keys.

Wakatsuki et al teach a scroll button(3c) located directly adjacent a shift key(3b)(see figures 1A, 1B and column 4, lines 60-68). It would have been obvious to have modified Russo with the teaching of Wakatsuki, since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art.





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5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Maynard et al(5,557,299).

Russo fail to disclose shift keys are color coded.

Maynard et al teach a keyboard having a color code(Green, Red, Blue, Yellow)(see figure 5; column 5, lines 57-68 and column 6, lines 1-36). It would have been obvious to have modified Russo with the teaching of Maynard et al, so a user can first easily locate the type of key by its color(see column 5, lines 65-68 and column 6, line 1).

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Choate(5,352,050).

Russo fails to disclose at least two multi-letter words would be come out when read one of rows of selected letter keys from left to right.

Choate teaches a keyboard having tow multi-letter words (I H O T) came out when read one of rows of selected letter keys from left to right (see figure 2). It would have been obvious to have modified Russo with the teaching of Choate, since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art.

7. Claims 8-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo(5,336,002) in view of Chen(5,739,776).

Russo fails to disclose a tab key is located on the left or same row of the backspace key.

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At to claims 8-9 and 11-12, Chen teaches a keyboard comprising a tap key(15) same row to a backspace key(16)(see figures 1, 4 and column 2, lines 39-49). It would have been obvious to have modified Russo with the teaching of Chen, since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art.

As to claim 9, it would have been obvious to have a tab key mounted on the left side of the backspace key since the function of a key would not be effected by changing location of the key and a change in location is generally recognized as being within the level of ordinary skill in the art.

#### Conclusion

## 8. Any response to this action should be mailed to:

### Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

#### or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:





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(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication should be directed to Lun-yi, Lao at telephone number (703) 305-4873.

May 4, 2001

Lun-Yi Lao Primary Examiner